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	Application No.	Applicant(s)
Notice of Allowability	10/665,702	PRIETO ET AL.
	Examiner	Art Unit	
	Leila Malek	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *08/06/2007*.

2. ☒ The allowed claim(s) is/are *2-13,15,16,18-27 and 29-31*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of
        Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

DETAILED ACTION

Response to Amendment

1.   This office action is in response to the amendments received on 08/06/2007.

EXAMINER'S AMENDMENT

2.   An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided

by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be

submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview

with Barbara Doutre on 09/24/2007.

The application has been amended as follows:

a.   In claim 6, line 14, "CSD-coding" has been replaced by <u>Canonical Signal</u>

<u>Digit (CSD) coding</u>

b.   In claim 6, lines 20 and 21 (generating a compressed data ... of the digital

data systems;) have been underlined to show the amended parts properly.

c.   Claim 14 has been cancelled.

d.   Claim 17 has been cancelled.

e.   Claim 18 has been amended as following:

<u>A method of forward and inverse decomposing an input data signal and a</u>

<u>compressed data signal in a lossy digital data system, comprising the steps of: receiving</u>

<u>an input signal through the a decomposition stage of the digital data system; generating</u>

<u>a series of wavelet coefficients for an analysis filter bank as part of an encoder stage of</u>

the digital data system; generating a series of wavelet coefficients for a synthesis filter bank as part of the decoder stage of the digital data system; representing the wavelet filter coefficients for the analysis filter bank as canonical signal digit (CSD) thereby forming a CSD-coded optimal representation of the analysis filter; representing the wavelet filter coefficients for the synthesis filter bank as canonical signal digit (CSD) thereby forming a CSD-coded optimal representation of the synthesis filter; selecting a ~~the~~ value, Ma, to represent the resulting number of CSD-coded coefficients from the optimal representation for the analysis filter, adaptively adjusting the value of Ma to reduce the number of CSD-coded coefficients from the optimal representation of the analysis filter; performing a forward signal decomposition for the input data signal using the CSD- coded analysis filter; and performing an inverse signal transformation on the compressed data signal using the CSD-coded synthesis filter to generate an output signal substantially similar to the input data signal.

> f.   In claim 25, line 1, "the step of selecting" has been replaced by a step of selecting
>
> g.   Claim 28 has been cancelled.
>
> h.   In claim 30, "the step of selecting" has been replaced by a step of selecting
>
> i.   Dependency of claim 31 has been changed from claim 23 to claim 25.

Allowable Subject Matter

3.   Claims 2-13,15,16,18-27 and 29-31 are allowed. The following is an examiner's statement of reasons for allowance: as to a comprehensive search of prior art of record

failed to disclose, either alone or in combination, a method of forward and inverse decomposing an input data signal and a compressed data signal, comprising the steps of: receiving an input signal through the a decomposition stage of the digital data system; generating a series of wavelet coefficients for an analysis filter bank as part of an encoder stage of the digital data system; generating a series of wavelet coefficients for a synthesis filter bank as part of the decoder stage of the digital data system; representing the wavelet filter coefficients for the analysis filter bank as canonical signal digit (CSD) thereby forming a CSD-coded optimal representation of the analysis filter; representing the wavelet filter coefficients for the synthesis filter bank as canonical signal digit (CSD) thereby forming a CSD-coded optimal representation of the synthesis filter; selecting a value to represent the resulting number of CSD-coded coefficients from the optimal representation for the analysis filter, adaptively adjusting the value above to reduce the number of CSD-coded coefficients from the optimal representation of the analysis filter; performing a forward signal decomposition for the input data signal using the CSD- coded analysis filter; and performing an inverse signal transformation on the compressed data signal using the CSD-coded synthesis filter to generate an output signal substantially similar to the input data signal.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (US 5,844,610).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leila Malek whose telephone number is 571-272-8731. The examiner can normally be reached on 9AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Leila Malek
Examiner
Art Unit 2611

L.M.

MOHAMMED GHAYOUR
SUPERVISORY PATENT EXAMINER